ATTACHMENT A

GENERAL FACILITY DESCRIPTION AND PROCESS INFORMATION

Waste Isolation Pilot Plant Hazardous Waste Permit July 8, 2005 (This page intentionally blank)

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1	A-1	Facility Description				
2		Abstract				
3		NAME OF FACILITY:	Waste Isolation Pilot Plant			
4 5 6		OWNER and CO-OPERATOR:	U.S. Department of Energy P.O. Box 3090 Carlsbad, NM 88221			
7 8 9		CO-OPERATOR:	Washington TRU Solutions LLC P.O. Box 2078 Carlsbad, NM 88221			
10 12 12 13		RESPONSIBLE OFFICIALS:	Lloyd L. PiperDavid C. Moody, Acting Manager DOE/Carlsbad Field Office Richard D. Raaz, General Manager Washington TRU Solutions LLC			
14 15 16		FACILITY MAILING ADDRESS:	U.S. Department of Energy P.O. Box 3090 Carlsbad, NM 88221			
17 18		FACILITY LOCATION:	30 miles east of Carlsbad on the Jal Highway, in Eddy County.			
19		TELEPHONE NUMBER:	505/234-7300			
20		U.S. EPA I.D. NUMBER:	NM4890139088			
21 22		GEOGRAPHIC LOCATION:	32° 22' 30" N 103° 47' 30" W			
23		DATE OPERATIONS BEGAN:	November 26, 1999			

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A-2 <u>Description of Activities</u>

- The Waste Isolation Pilot Plant (WIPP) is a facility for the management, storage and disposal of
- transuranic (**TRU**) mixed waste. Only contact-handled (**CH**) TRU mixed waste is permitted for
- storage or disposal at the WIPP facility. No remote-handled (RH) TRU mixed waste will be
- 5 accepted at the facility under this permit.

6 A-3 Property Description

- 7 The WIPP facility has been divided into functional areas. The Property Protection Area (**PPA**),
- surrounded by a chain-link security fence, encompasses 34.16 acres and provides security and
- 9 protection for all major surface structures. The DOE Off Limits Area encloses the PPA, and is
- approximately 1,454 acres. These areas define the DOE exclusion zone within which certain
- items and material are prohibited. The final zone is marked by the WIPP Site Boundary (WIPP
- land withdrawal area) a 16-section Federal land area under the jurisdiction of the DOE.

A-4 Facility Type

- There are three basic groups of structures associated with the WIPP facility: surface structures,
- shafts and underground structures. The surface structures accommodate the personnel,
- equipment, and support services required for the receipt, preparation, and transfer of TRU
- mixed waste from the surface to the underground. There are two surface locations where TRU
- mixed waste will be managed. The first includes a portion of the Waste Handling Building
- (WHB), of which 33,175 square feet is designated as the WHB Container Storage Unit (WHB
- 20 Unit) for TRU mixed waste management. The second area designated for managing TRU mixed
- waste is the Parking Area Container Storage Unit (Parking Area Unit), an outside container
- storage area which extends south from the WHB to the rail siding. The Parking Area Unit
- provides storage space for up to 12 loaded Contact Handled Packages on an asphalt and
- concrete surface encompassing approximately 115,000 square feet.
- 25 Four vertical shafts connect the surface facility to the underground. These are the Waste Shaft.
- the Salt Handling Shaft, the Exhaust Shaft and the Air Intake Shaft. The Waste Shaft is the only
- shaft used to transport TRU mixed waste to the underground. The WIPP underground
- structures are located in a mined salt bed 2,150 feet below the surface.
- The underground structures include the underground Hazardous Waste Disposal Units
- 30 (HWDUs), an area for future underground HWDUs, the shaft pillar area, interconnecting drifts
- and other areas unrelated to the RCRA Hazardous Waste Permit. The underground HWDUs
- are defined as waste panels, each consisting of seven rooms and two access drifts. The WIPP
- underground area is designated as Panels 1 through 10, although only Panels 1 through 7 will
- be used under the terms of this permit. Each of the seven rooms is approximately 300 feet long.
- 35 33 feet wide and 13 feet high.

A-5 Waste Description

- Wastes destined for WIPP are byproducts of nuclear weapons production and have been
- identified in terms of waste streams based on the processes that produced them. Each waste

- stream identified by generators is assigned to a Waste Summary Category to facilitate RCRA waste characterization, and reflect the final waste forms acceptable for WIPP disposal.
 - These Waste Summary Categories are:

S3000—Homogeneous Solids

Solid process residues defined as solid materials, excluding soil, that do not meet the applicable regulatory criteria for classification as debris [20.4.1.800 NMAC, (incorporating 40 CFR §268.2(g) and (h))]. Solid process residues include inorganic process residues, inorganic sludges, salt waste, and pyrochemical salt waste. Other waste streams are included in this Waste Summary Category based on the specific waste stream types and final waste form. This category includes wastes that are at least 50 percent by volume solid process residues.

S4000—Soils/Gravel

This waste summary category includes waste streams that are at least 50 percent by volume soil. Soils are further categorized by the amount of debris included in the matrix.

S5000—Debris Wastes

This waste summary category includes waste that is at least 50 percent by volume materials that meet the NMAC criteria for classification as debris (20.4.1.800 NMAC (incorporating 40 CFR §268.2)). Debris means solid material exceeding a 2.36 inch (60 millimeter) particle size that is intended for disposal and that is: 1) a manufactured object, 2) plant or animal matter, or 3) natural geologic material.

The S5000 Waste Summary Category includes metal debris, metal debris containing lead, inorganic nonmetal debris, asbestos debris, combustible debris, graphite debris, heterogeneous debris, and composite filters, as well as other minor waste streams. Particles smaller than 2.36 inches in size may be considered debris if the debris is a manufactured object and if it is not a particle of S3000 or S4000 material.

If a waste does not include at least 50 percent of any given category by volume, characterization shall be performed using the waste characterization process required for the category constituting the greatest volume of waste for that waste stream.

Wastes may be generated at the WIPP facility as a direct result of managing the TRU and TRU mixed wastes received from the off-site generators. Such waste may be generated in either the WHB or the underground. This waste is referred to as "derived waste." All such derived waste will be placed in the rooms in HWDUs along with the TRU mixed waste for disposal.

Non-mixed hazardous wastes generated at the WIPP, through activities where contact with TRU mixed waste does not occur, are characterized, placed in containers, and stored (for periods not exceeding the limits specified in 20.4.1.300 NMAC (incorporating 40 CFR §262.34)) until they are transported off site for treatment and/or disposal at a permitted facility. This waste generation and accumulation activity, when performed in compliance with 20.4.1.300 NMAC (incorporating 40 CFR §262), is not subject to RCRA permitting requirements and, as such, is not addressed in the permit.

1	A-6	Chronology of	Events Relevant to Changes in Ownership or Operational Control
2 3 4 5 6 7 8 9	Decem	nber 19, 1997	NMED received notification of a change of name/ownership from Westinghouse Electric Corporation to CBS Corporation. The WIPP Management and Operating Contractor (MOC), Westinghouse Waste Isolation Division (WID), became a division of Westinghouse Electric Company, which in turn was a division of CBS Corporation. Notification to NMED was made by the permit applicant in a letter dated December 18, 1997. The permit application was under review, but a draft permit was not yet issued.
10 11 12 13 14 15 16 17	Septer	mber 22, 1998	NMED received notification of a pending transfer of ownership for the MOC, Westinghouse WID, from CBS Corporation to an as-yet-to-benamed limited liability company owned jointly by British Nuclear Fuels, plc and Morrison-Knudsen Corporation. The transfer of ownership was scheduled to occur on or about December 15, 1998. Notification to NMED was made by the permit applicant in a letter dated September 17, 1998. The draft permit had been issued for public comment, but the final permit was not yet issued.
18 19 20 21 22 23 24 25	March	9, 1999	NMED again received notification of the pending divestiture of the MOC, Westinghouse WID, by CBS Corporation to the limited liability company owned jointly by British Nuclear Fuels, plc and Morrison-Knudsen Corporation known as MK/BNFL GESCO LLC. The new MOC would be renamed to Westinghouse Government Environmental Services Company LLC. Notification to NMED was made by the permit applicant in a letter dated March 2, 1999. The public hearing on the permit was underway, but the final permit was not yet issued.
26 27 28 29 30 31 32 33 34	March	26, 1999	NMED received official notification of the divestiture of Westinghouse Electric Company by CBS Corporation to MK/BNFL GESCO LLC effective March 22, 1999. The MOC was renamed Westinghouse Government Environmental Services Company LLC (WGES), of which Westinghouse Waste Isolation Division was a division. This transaction constituted a change of operational control under 20.4.1.900 NMAC (incorporating 40 CFR §270.40). Notification to NMED was made by the permit applicant in a letter dated March 24, 1999. The public hearing on the permit was nearly concluded, but the final permit was not yet issued.
35 36 37 38 39	April 2	8, 1999	NMED received a revised Part A Permit Application in a letter dated April 21, 1999, reflecting that the Westinghouse Waste Isolation Division, cooperator of the WIPP hazardous waste facility, was now a part of WGES. However, the final permit, issued October 27, 1999, did not reflect the change in ownership.
40 41 42	July 25	5, 2000	NMED received a Class 1 permit modification in a letter dated July 21, 2000, changing the name in the Permit from Westinghouse Electric Corporation to Westinghouse Government Environmental Services

1 2 3 4		Company LLC (WGES), Waste Isolation Division (WID). However, this notification did not constitute the required permit modification under 20.4.1.900 NMAC (incorporating 40 CFR §270.40) necessary to reflect the transfer of the permit to a new operator.
5 6 7 8 9 10 11 12	December 15, 2000	DOE announced that it had awarded a five-year contract for management and operation of WIPP to Westinghouse TRU Solutions LLC, a limited liability company owned jointly by WGES LLC and Roy F. Weston, Inc. The announcement further stated that, following a brief transition period, the new contractor would assume MOC responsibilities on February 1, 2001. This transaction constituted a change of operational control under 20.4.1.900 NMAC (incorporating 40 CFR §270.40) requiring a Class 1 permit modification with prior written approval of NMED.
13 14 15 16 17 18 19	February 5, 2001	NMED received a Class 1 permit modification in a letter dated February 2, 2001, which notified NMED of an organizational name change of the MOC from Westinghouse Government Environmental Services Company LLC Waste Isolation Division to Westinghouse TRU Solutions LLC. However, this notification did not constitute the required permit modification under 20.4.1.900 NMAC (incorporating 40 CFR §270.40) necessary to reflect the transfer of the permit to a new operator.
20 21 22 23 24 25	December 31, 2002	NMED received a Class 1 permit modification in a letter dated December 27, 2002, which changed the name of the MOC from Westinghouse TRU Solutions LLC to Washington TRU Solutions LLC. Again, this notification did not constitute the required permit modification under 20.4.1.900 NMAC (incorporating 40 CFR §270.40) necessary to reflect the transfer of the permit to a new operator.
26 27 28 29	February 28, 2003	NMED received a Class 1 permit modification requiring prior agency approval in a letter dated February 28, 2003, to satisfy the requirements specified in 20.4.1.900 NMAC (incorporating 40 CFR §270.40) to reflect the transfer of the permit to a new operator.
30 31 32 33 34 35 36 37 38	September 16, 2004	NMED received a Class 1 permit modification requiring prior agency approval in a letter dated September 16, 2004, describing a change of ownership of Washington TRU Solutions LLC (WTS). WTS is owned jointly by WGES, managing member, and Weston Solutions, Inc. WGES had been owned jointly by Washington Group International, Inc., and BNFL Nuclear Services, Inc However, Washington Group International has acquired BNFL's prior interest in the former Westinghouse government services businesses, which includes BNFL's prior interest in WGES.